REMARKS

In response to the Advisory Action (Paper No. 20081104) mailed on 7 November 2008, Applicant respectfully requests re-examination, reconsideration, and entry of the following remarks.

Regarding the Declaration under 37 CFR 1.132 submitted by the Applicant, the Examiner stated:

> "In regard to the 132 declaration, the examiner finds that the declaration reasonably establishes that the 150 micron spacing provides for bone growth, but fails to reasonably establish that the spacing is critical or optimal as argued by applicant. No data is provided for any other spacing. There is no data to suggest that the bone growth at 150 micron spacing is unexpected."

Applicant respectfully traverses.

Respectfully, the evident presented in the Declaration under 37 CFR 1.132, in connection with Applicant's original specification, clearly demonstrates the superiority of Applicant's "150 μm spacing".

Specifically, Applicant's original specification explicitly discloses that the number of micro-patterns formed on the thread inclines is preferably to be as great as possible, because as the number of the micro-patterns increased, the contact area of the implant is increased,[1] thereby enhancing the

[1] Page 6, lines 3-5 of Applicant's original specification reads: "Meanwhile, as **the number of the patterns** is increased, **the contact area** of the implant is also remarkably **increased**, whereas time for machining the patterns is also extended."

mechanical engaging force between the implant and the bone.[2] In order to increase the number of micro-patterns, the spacing between the micro-patterns should be decreased accordingly. On the other hand, Applicant's original specification explicitly discloses that the size of the micro-patterns should be 100 μm or more because a micro-groove needed to grow the jaw bone tissue has a minimum size of about 100 μm.[3] Accordingly, Applicant concludes that the micro-patterns should have a size of 150 μm, in order to provide a micro-groove having enough size needed to grow the jaw bone tissue, while maintaining the largest possible surface contact area between the implant and the bone. The evidence presented in Applicant's Declaration under 37 CFR 1.132 further shows that the 150 μm micro-pattern provides optimal site for bone ingrowth, promotes bone mineralization and eventually maturation.

On the other hand, Hansson '838 merely discloses that the distance to the adjacent microthread may be 200 μm. Hansson '838's 200 μm is different from Applicant's 150 μm by more than **30 percent**. In addition, there is no teaching in the combination of Hansson '838 and Cuilleron '512 suggesting the desirability of maximizing contact area between the bone and the implant while promoting bone ingrowth in the implant. It is doubtful that one with ordinary skill in the art will

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[2] Page 3, lines 25-30 of Applicant's original specification reads: "The present invention has been made to solve the above problems, and it is an object of the present invention to provide a helical implant, which is formed with a micro-pattern on thread inclines of the helical implant, so that **a contact area and a engaging force between the implant and the jaw bone can be increased**, and so that stress concentration can be restricted, thereby dispersing a physiological load."

[3] Page 5, lines 23-25 of Applicant's original specification reads: "... since a micro-groove needed to grow the jaw bone tissue has a minimum size of about 100 Sm, the pattern must be formed to have a size of 100 um or more, preferably 150 m."

combine Hansson '838 and Cuilleron '512 to reach Applicant's "150 μm spacing".

In summary, Applicant's evidence presented in the Declaration filed under 37 CFR 1.132, in connection with Applicant's original specification, clearly demonstrates the superiority of the pending claims' "150 μm spacing". See the pending claims:

> claim 7, "two adjacent said recesses being separated by a distance on an order of **150 μm**";
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> claim 13, "two adjacent said recesses being separated by a distance on an order of **150 μm**"; and
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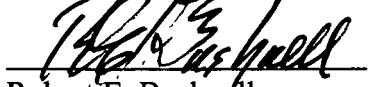
> claim 19, "the distance between the neighboring micro-patterns being approximately **150 μm**".

In view of the foregoing remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unsolved, the Examiner is respectfully requested to telephone Applicant's undersigned attorney.

A fee of $405.00 (Small Entity) is incurred by filing a Request for Continued Examination (RCE), a fee of $130.00 is incurred for requesting suspension of action under 37 C.F.R. §1.103(c), and a fee of $310.00 (Small Entity) is incurred by filing a petition for three-month extension of time. Please note that two-month extension of time fee of $245.00 (Small Entity) has been previously paid on 23 October 2008. ($555.00 - $245.00 = $310.00) Applicant's check drawn to the order of the Commissioner accompanies this response. Should there be a deficiency in payment, or should other

fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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